

What is claimed:

1. A method for placing an embolic coil at a location within an aneurysm comprising the steps of:

providing a catheter having a proximal end and a distal end, a balloon adjacent to the distal end, and an inflation port at the proximal end communicating via an inflation lumen with the balloon, a guidewire opening at the distal end and a spaced, side opening adjacent the distal end;

introducing the catheter into the vessel of a patient via a guidewire extending through the guidewire opening to generally align the side opening with the aneurysm;

inflating the balloon to stabilize the position of the catheter;

introducing an embolic coil deployment device from the proximal end of the catheter and through the side opening to deliver an embolic coil into the aneurysm;

deflating the balloon; and

thereafter withdrawing the catheter from the patient's vessel.

2. A method for placing an embolic coil at a location within an aneurysm comprising the steps of:

providing a catheter having a proximal end and a distal end, a balloon adjacent the distal end, an inflation port at the proximal end communicating via an inflation lumen with the balloon, a delivery port at the proximal end communicating with a delivery lumen, a guidewire opening at the distal end communicating with the delivery lumen, and a side opening adjacent the

distal end also communicating with the delivery lumen;

preloading the catheter with a guidewire extending from the delivery port through the delivery lumen and distal of the guidewire opening;

thereafter introducing the catheter into the vessel of a patient to generally align the side opening with the aneurysm;

inflating the balloon to stabilize the position of the catheter;

thereafter, withdrawing the guidewire and introducing an embolic coil deployment device into the delivery lumen and through the side opening to deliver an embolic coil into the aneurysm;

deflating the balloon; and

thereafter withdrawing the catheter from the patient's vessel.

3. A method for placing a medical agent at a location within a patient's vessel, comprising the steps of:

providing a catheter having a proximal end and a distal end, a balloon adjacent to the distal end, an inflation port at the proximal end communicating via an inflation lumen with the balloon, a delivery port at the proximal end communicating with a delivery lumen, a guidewire opening at the distal end communicating with the delivery lumen, and a side opening adjacent to the distal end also communicating with the delivery lumen;

preloading the catheter with a guidewire extending from the delivery port through the delivery lumen and distal of the guidewire opening;

thereafter introducing the catheter into the vessel of a patient to generally align the side opening with the location to be treated;

inflating the balloon to stabilize the position of the catheter;

thereafter withdrawing the guidewire and introducing the medical agent into the delivery lumen and through the side opening whereby it is placed in the location to be treated;

deflating the balloon; and

thereafter withdrawing the catheter from the patient's vessel.

4. A method as defined in claim 3, in which said medical agent comprises an embolic coil.

5. A method as defined in claim 3, in which said medical agent comprises a therapeutic agent.

6. A method as defined in claim 3, in which said medical agent comprises medicament.

7. A method as defined in claim 3, in which said medical agent comprises a diagnostic agent.

8. A method as defined in claim 3, in which said medical agent comprises an embolic agent.

9. A method as defined in claim 8, in which said embolic agent is selected from the group consisting of liquid embolic agents, biocompatible polymer-solvent combinations, biocompatible polymers and other embolizing compositions.

10. A balloon catheter which comprises:

a catheter body having a proximal end and a distal end;

a balloon adjacent the distal end;

an inflation port at the proximal end;

the catheter body defining an inflation lumen;

said inflation port communicating via the inflation lumen with the balloon;

a delivery port at the proximal end;

said body defining a delivery lumen separate from said inflation lumen;

a guidewire opening at the distal end communicating with the delivery lumen;

a side opening adjacent the distal end, spaced from the guidewire opening, and communicating with the delivery lumen;

said balloon being substantially radially aligned with said side opening and substantially oppositely positioned on the catheter with respect to the side opening.